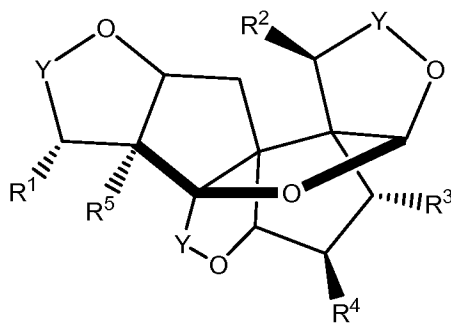


AMENDMENTS TO THE CLAIMS

1. (Original): A compound having the formula:



(I)

or a pharmaceutically acceptable salt thereof,

wherein:

each occurrence of Y is independently $-\text{CH}_2-$ or $-\text{C}(\text{O})-$;

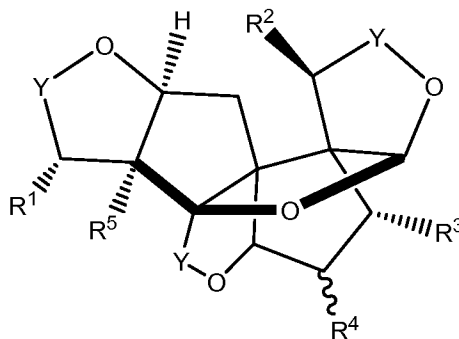
R^1 and R^3 are each independently $-\text{H}$ or $-\text{C}_1-\text{C}_6$ alkyl;

R^2 is $-\text{H}$, $-\text{OH}$, $-\text{O}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkenyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})$ -aryl, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1-\text{C}_5$ alkyl, or $-\text{O}-\text{SO}_2$ -aryl;

R^4 is $-\text{C}_1-\text{C}_5$ alkyl, $-\text{NH}_2$, -halo, $-\text{C}_2-\text{C}_5$ alkenyl, $-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkenyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})$ -aryl, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1-\text{C}_5$ alkyl, or $-\text{O}-\text{SO}_2$ -aryl; and

R^5 is $-\text{H}$ or $-\text{OH}$.

2. (Original): A composition consisting essentially of two or more structurally distinct compounds, each having the formula:



(II)

wherein:

each occurrence of Y is independently $-\text{CH}_2-$ or $-\text{C}(\text{O})-$;

R^1 and R^3 are each independently $-\text{H}$ or $-\text{C}_1\text{-C}_6$ alkyl;

R^1 and R^3 are each independently $-\text{H}$ or $-\text{C}_1\text{-C}_6$ alkyl;

R^2 is $-\text{H}$, $-\text{OH}$, $-\text{O-C}_1\text{-C}_5$ alkyl, $-\text{O-C}_2\text{-C}_5$ alkenyl, $-\text{O-C}_2\text{-C}_5$ alkynyl, $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$ alkyl, $-\text{O-C}(\text{O})\text{-aryl}$, $-\text{O-CO-NH-C}_1\text{-C}_5$ alkyl, $-\text{O-SO}_2\text{-C}_1\text{-C}_5$ alkyl, or $-\text{O-SO}_2\text{-aryl}$;

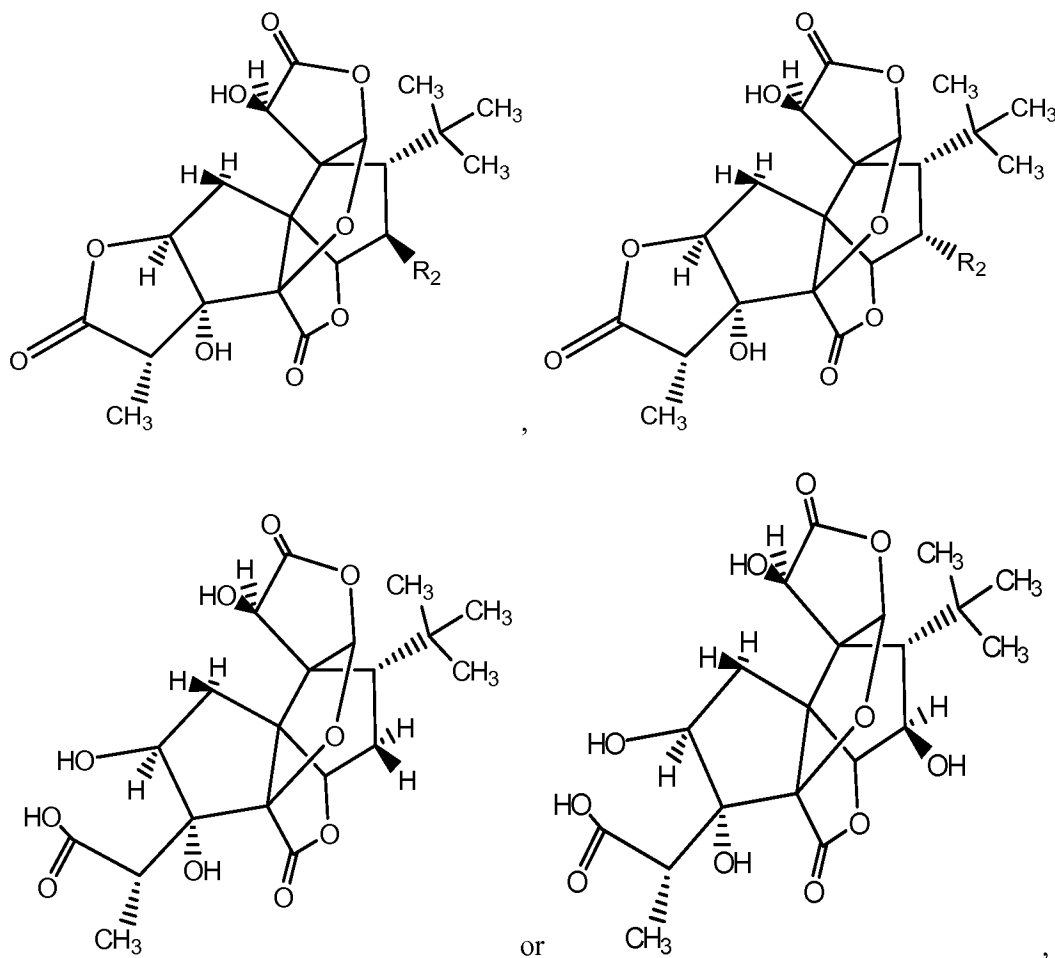
R^4 is $-\text{C}_1\text{-C}_5$ alkyl, $-\text{NH}_2$, $-\text{halo}$, $-\text{C}_2\text{-C}_5$ alkenyl, $-\text{C}_2\text{-C}_5$ alkynyl, $-\text{O-C}_1\text{-C}_5$ alkyl, $-\text{O-C}_2\text{-C}_5$ alkenyl, $-\text{O-C}_2\text{-C}_5$ alkynyl, $-\text{O-C}(\text{O})\text{-C}_1\text{-C}_5$ alkyl, $-\text{O-C}(\text{O})\text{-aryl}$, $-\text{O-CO-NH-C}_1\text{-C}_5$ alkyl, $-\text{O-SO}_2\text{-C}_1\text{-C}_5$ alkyl, or $-\text{O-SO}_2\text{-aryl}$; and

R^5 is $-\text{H}$ or $-\text{OH}$.

3. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is $-\text{CH}_2-$.

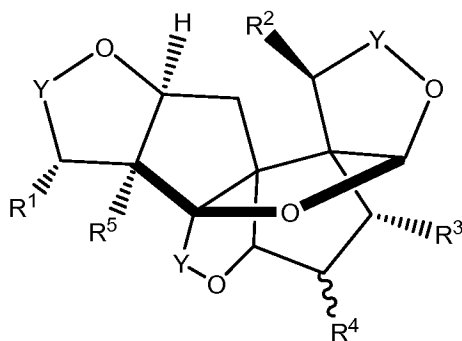
4. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), each occurrence of Y is $-C(O)-$.
5. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^1 is $-C_1-C_6$ alkyl.
6. (Original): The composition of claim 5, wherein R^1 is methyl.
7. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^3 is $-C_1-C_6$ alkyl.
8. (Original): The composition of claim 7, wherein R^3 is *tert*-butyl.
9. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^4 is $-OH$.
10. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^5 is $-OH$.
11. (Previously Presented): The composition of claim 2, wherein for at least one compound of formula (II), R^2 is $-OH$.

12. (Previously Presented): A composition consisting essentially of a first compound having the formula:



wherein R_2 is $-H$, $-C_1-C_5$ alkyl, $-OH$, $-NH_2$, $-halo$, $-C_2-C_5$ alkenyl, $-C_2-C_5$ alkynyl, $-O-C_1-C_5$ alkyl, $-O-C_2-C_5$ alkenyl, $-O-C_2-C_5$ alkynyl, $-O-C(O)-C_1-C_5$ alkyl, $-O-C(O)-aryl$, $-O-CO-NH-C_1-C_5$ alkyl, $-O-SO_2-C_1-C_5$ alkyl, or $-O-SO_2-aryl$;

and one or more structurally distinct compounds, each having the formula:



(II)

wherein each occurrence of Y is independently $-\text{CH}_2-$ or $-\text{C}(\text{O})-$;

R^1 and R^3 are each independently $-\text{H}$ or $-\text{C}_1\text{-C}_6$ alkyl;

R^1 and R^3 are each independently $-\text{H}$ or $-\text{C}_1\text{-C}_6$ alkyl;

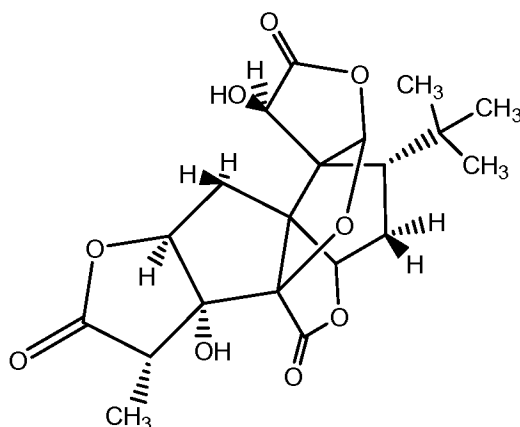
R^2 is $-\text{H}$, $-\text{OH}$, $-\text{O}-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{C}_2\text{-C}_5$ alkenyl, $-\text{O}-\text{C}_2\text{-C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})\text{-aryl}$, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1\text{-C}_5$ alkyl, or $-\text{O}-\text{SO}_2\text{-aryl}$;

R^4 is $-\text{C}_1\text{-C}_5$ alkyl, $-\text{NH}_2$, $-\text{halo}$, $-\text{C}_2\text{-C}_5$ alkenyl, $-\text{C}_2\text{-C}_5$ alkynyl, $-\text{O}-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{C}_2\text{-C}_5$ alkenyl, $-\text{O}-\text{C}_2\text{-C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})\text{-aryl}$, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1\text{-C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1\text{-C}_5$ alkyl, or $-\text{O}-\text{SO}_2\text{-aryl}$; and

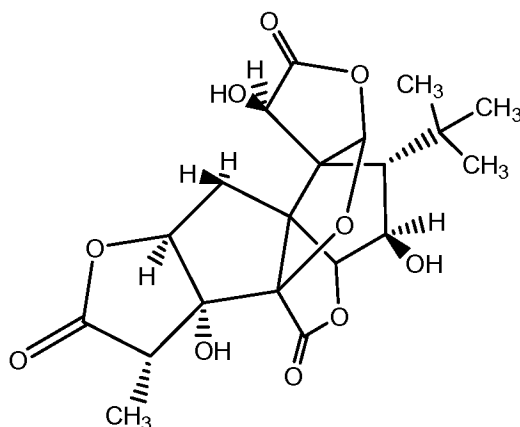
R^5 is $-\text{H}$ or $-\text{OH}$.

13. (Canceled).

14. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:



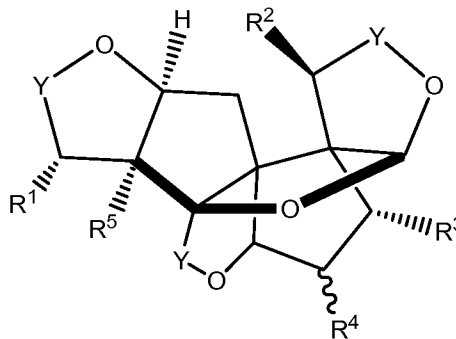
15. (Previously Presented): The composition of claim 12, wherein the first compound is a compound having the formula:



16-17. (Canceled)

18. (Previously Presented): A composition consisting essentially of Ginkgolide A and Ginkgolide J.

19. (Previously Presented): A composition consisting essentially of (i) an antioxidant, a pharmaceutical carrier, or a combination thereof and (ii) two or more structurally distinct compounds, each having the formula:



(II)

wherein:

each occurrence of Y is independently $-\text{CH}_2-$ or $-\text{C}(\text{O})-$;

R¹ and R³ are each independently $-\text{H}$ or $-\text{C}_1-\text{C}_6$ alkyl;

R¹ and R³ are each independently $-\text{H}$ or $-\text{C}_1-\text{C}_6$ alkyl;

R² is $-\text{H}$, $-\text{OH}$, $-\text{O}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkenyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})-\text{aryl}$, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1-\text{C}_5$ alkyl, or $-\text{O}-\text{SO}_2-\text{aryl}$;

R⁴ is $-\text{C}_1-\text{C}_5$ alkyl, $-\text{NH}_2$, $-\text{halo}$, $-\text{C}_2-\text{C}_5$ alkenyl, $-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkenyl, $-\text{O}-\text{C}_2-\text{C}_5$ alkynyl, $-\text{O}-\text{C}(\text{O})-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{C}(\text{O})-\text{aryl}$, $-\text{O}-\text{CO}-\text{NH}-\text{C}_1-\text{C}_5$ alkyl, $-\text{O}-\text{SO}_2-\text{C}_1-\text{C}_5$ alkyl, or $-\text{O}-\text{SO}_2-\text{aryl}$; and

R⁵ is $-\text{H}$ or $-\text{OH}$.

20. (Original): The composition of claim 19, wherein the antioxidant is vitamin C, vitamin E, N-acetyl-L-cysteine, resveratrol, coenzyme Q, alpha-lipoic acid, lycopene, or any combination thereof.

21. (Previously Presented): The composition of claim 19, wherein the antioxidant is a biflavone.

22. (Original): The composition of claim 21, wherein the biflavone is amentoflavone, ailobetin, ginkgetin, isoginkgetin, sciadopirysin, or any combination thereof.

23. (Previously Presented): The composition of claim 19, wherein the antioxidant is a flavonoid.

24. (Original): The composition of claim 23, wherein the flavonoid is a flavonol glycoside.

25. (Original): The composition of claim 24, wherein the flavonol glycoside is quercetin, kaempferol, isorhamnetin, or any combination thereof.

26-28. (Canceled).

29. (Previously Presented): The composition of claim 18, wherein the composition is obtained using a process comprising:

(i) extracting Ginkgo Biloba plant material with ethyl acetate and filtering the resultant solution to provide a first filtered residue and a first filtrate;

(ii) diluting the first filtered residue with diethyl ether and filtering the resultant solution to provide a second filtered residue and a second filtrate;

(iii) diluting the second filtered residue with methanol and filtering the resultant solution to provide a third residue and a third filtrate;

(iv) concentrating the third filtrate and subjecting the resultant concentrate to chromatography under conditions sufficient to provide a first fraction which comprises a mixture of Ginkgolide A and Ginkgolide B, and a second fraction which comprises a mixture of Ginkgolide C and Ginkgolide J;

(v) combining the first and second fractions and concentrating the combined first and second fractions to provide a concentrate which comprises Ginkgolide A, Ginkgolide B, Ginkgolide C and Ginkgolide J;

(vi) diluting the concentrate obtained in step (v) with an organic solvent and contacting the components of the resultant solution with benzyl bromide in the presence of a non-nucleophilic base under conditions sufficient to provide a product mixture which comprises unreacted Ginkgolide A, unreacted Ginkgolide J, benzylated Ginkgolide B and benzylated Ginkgolide C;

(vii) subjecting the product mixture obtained in step (vii) to chromatography under conditions sufficient to provide a composition comprising Ginkgolide A and Ginkgolide J; and

(viii) purifying the composition obtained in step (vii) to obtain a purified composition consisting essentially of Ginkgolide A and Ginkgolide J.

30-57. (Canceled).